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| 09/508,617      | 03/14/2000  | KOJI IDEI            | 000225              | 8477             |

23850 7590 02/10/2006

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| EXAMINER |
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FERGUSON, LAWRENCE D

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| ART UNIT | PAPER NUMBER |
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1774

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/508,617

Applicant(s)

IDEI ET AL.

Examiner

Lawrence D. Ferguson

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. This action is in response to the amendment mailed December 08, 2005.  
Claims 1 and 5 were amended rendering claims 1 and 3-5 pending in this case.

### ***New Matter - 35 U.S.C. 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1 and 3-5 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claim 1, the phrases, "a cationic resin present on a side of the support on which ink jet recording or electrophotographic recording is to be carried out, the cationic resin adhered thereto in a dry adhering amount" and "a surface resistivity of  $1.0 \times 10^{10} - 9.9 \times 10^{11} \Omega$  for the recording side of the paper" is not supported by the specification. Additionally, in claim 5, the phrase "the surface resistivity of  $1.0 \times 10^{10} - 9.9 \times 10^{11} \Omega$  for the recording side of the paper" is not supported by the specification.

***Claim Rejections – 35 USC § 102(b)***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujioka et al. (U.S. 4,279,961).

Fujioka discloses a recording material with a base sheet (abstract) where a coating is applied to the base sheet comprising cationic resins, such as quaternary ammonium salts, a surface resistivity of  $10^6$  to  $10^{10}$  ohms and 2 to 20 g/m<sup>2</sup> by dry weight (column 5, lines 33-44) where the resistivity is higher in an atmosphere of lower humidity (column 1, lines 39-48). Fujioka further discloses coating a paper (column 8, lines 9-11).

In instant claim 1, the phrase “as measured by colloidal titration method” introduces a process limitation to the product claim. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966. Further, process limitations are given no patentable weight in product claims. Although Fujioka teaches the recording material can be used in copying

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machines and other printers (column 1, lines 9-19) the reference does not explicitly disclose it is used for ink jet and electrophotographic recording. In claim 1, the phrases, "for ink jet and electrophotographic recording" and "for the recording side of the paper" are intended uses. Additionally, in claim 5, the phrase "for the recording side of the paper" is an intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). In claim 1, the phrase "on which ink jet recording or electrophotographic recording is to be carried out" constitutes a "capable of" limitation and that such a recitation that an element is 'capable of' performing a function is not a positive limitation but only requires the ability to so perform.

Because Fujioka discloses a paper comprising the same cationic resin (quaternary ammonium salt) and surface resistivity as instantly claimed, the cation equivalent is an inherent feature. The claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). Mere recitation of newly-discovered function or property, inherently possessed by things in prior art, does not cause claim drawn to those things to distinguish over prior art. The Patent Office can require applicant to prove that subject matter shown to be in prior art

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does not possess characteristic relied on where it has reason to believe that functional limitation asserted to be critical for establishing novelty in claimed subject matter may be inherent characteristic of prior art; this burden of proof is applicable to product and process claims reasonably considered as possessing allegedly inherent characteristics.

***Claim Rejections – 35 USC § 103(a)***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujioka et al. (U.S. 4,279,961) in view of Shepherd (U.S. 4,207,142).

Fujioka is relied upon for claim 1 as above. Although Fujioka does not explicitly teach making the paper from pulp, it would have been obvious for the paper to contain pulp because paper is conventionally made from pulp. Fujioka does not teach the paper having a neutral rosin sizing agent or alkenyl succinic anhydride as an internal sizing agent. Shepherd teaches paper sizing materials consisting of rosin (column 1, lines 18-20) and alkenyl succinic anhydride sizing agents (column 2, lines 45-63). It would have been obvious to one of ordinary skill in the art to include a rosin or alkenyl succinic anhydride sizing agent in the paper of Fujioka because Shepherd teaches the sizing

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agents impart to paper good resistance to acidic liquids and do not detract from the strength of the paper and can increase the strength of the finished sheets (column 13, lines 48-60).

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Koga et al (U.S. 6,805,929) teaches a recording paper usable in both inkjet recording and electrophotographic recording, which is coated with a cationic resin on one or both sides having a surface resistivity of  $1 \times 10^9$  to  $1 \times 10^{11}$  (abstract) and has a cationic equivalent (column 2, lines 1-10) as taught by related Japanese Application 10-216851 of the instantly claimed invention. Sugiyama et al (U.S. 6,773,770) teaches an ink jet recording material having an ink receiving layer formed on a support and including a cationic equivalent of 1.5 to 6 milli equivalent/g as determined by colloid titration (abstract). The priority of the instantly claimed application predates that of Sugiyama. Noguchi et al (U.S. 5,798,397) teaches a recording layer used for ink jet recording having cationic compounds (column 4, lines 15-26) and a cationic equivalent (column 20, lines 65-67).

### ***Response to Arguments***

9. Rejection made under 35 U.S.C. 102(b) as being anticipated by Fujioka et al. (U.S. 4,279,961) has been considered but is unpersuasive. Applicant argues that the portion of Fujioka quoted (column 5, lines 33-44) relates to an intermediate product and not the final product. Examiner maintains that because the material is used to make

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the invention, the cationic resins, such as quaternary ammonium salts, surface resistivity of  $10^6$  to  $10^{10}$  ohms and 2 to 20 g/m<sup>2</sup> by dry weight (column 5, lines 33-44) are present in the final product of the invention. Furthermore, the coating composition applied to the base sheet is a part of the final product, which is found in column 5, lines 36-39). Applicant further argues the claimed paper should be compared not with the intermediate product, but with the final product disclosed in Fujioka et al. The presently claimed paper is compared to the disclosure of Fujioka in its entirety. The materials used to form the recording material of Fujioka are a part of the recording medium. Applicant argues in Fujioka, a cationic resin is not present on the recording side of the paper. Fujioka discloses a recording material with a base sheet (abstract) where a coating is applied to the base sheet comprising cationic resins, (column 5, lines 33-44) which is on the recording side of the recording medium. Additionally, in claims 1 and 5, the phrases, "for the recording side of the paper" are intended uses. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. Applicant argues the phrase, "as measured by colloidal titration method" is not a product by process limitation. Examiner maintains the phrase is a product by process limitation as the cationic equivalent is the only structural portion of the limitation. Examiner maintains that the cation equivalent measured by the colloidal titration method is an inherent feature of Fujioka, as Applicant has not shown why it is not inherent.

Applicant further argues Shepherd also fails to mention or suggest the limitations recited in claim 1, as amended from which claims 3 and 4 depend. Because Fujioka has been maintained over the claimed invention, Shepherd is also maintained for reasons of record.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is 571-

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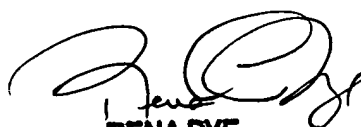
272-1522. The examiner can normally be reached on Monday through Friday 9:00 AM – 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



L. Ferguson  
Patent Examiner  
AU 1774



**RENA DYE**  
SUPERVISORY PATENT EXAMINER  
A.U. 1774 2/6/09